BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK :DRILLING OF BOREWELLS AND PROVIDING PUMP AND MOTOR AND LAYING PIPE LINE AT VINAYAKANAGARA, DWARAKANAGARA, KATTIGENAHALLI SURROUNDING AREA IN WARD No.05 BYATARAYANAPURA SUB DIVISION

									Estimation Cost.Rs	15000000.00
Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity		Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its quality & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc(P.No - 47, I.No-9.4,PRED 12-13 SR)									
		Each BW	14				14.00		3768.00	52752.00
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars and cap etc.,) ,with all lead and lift, loading, unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work .									
	0-50mtrs	Rmtr	14	50			700.00		347.00	242900.00
2a	50-100mtrs	Rmtr	14	50			700.00		442.00	309400.00
2b	100-150mtrs	Rmtr	14	50			700.00		456.00	319200.00
2c	150-200mtrs	Rmtr	14	50			700.00		536.00	375200.00
2d	200-250mtrs	Rmtr	14	50			700.00		634.00	443800.00
2e	250-300mtrs	Rmtr	14	50			700.00		700.00	490000.00
2f	300-350mtrs	Rmtr	14	50			700.00		825.00	577500.00
2g	350-400mtrs	Rmtr	14	50			700.00		900.00	630000.00
3	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) ,with all lead and lift, loading, unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work.(P.No-111, I.No-84,PRED 12-13 SR)									
		Rmtr	14	60			840.00		1364.75	1146390.00
	Basic Rate	**1325**								
	3% Area Weightage	**39.75**								
	Total	**1364.75**								
4	Providing and fixing 250mm dia PVC Pipe and as per specification and directions.(BWSSB SR 13-14,P.No.53 I.No.1 of sl.no.11.)									
		Rmtr	14	10			140.00		1133.00	158620.00
	Basic Rate	**1100**								
	3% Area Weightage	**33**								
	Total	**1133**								
5	175mm dia M.S. Casing cap(P.No-111,I.No-85,PRED 12-13 SR)									
		Each	14				14.00		103.00	1442.00
	Basic Rate	**100**								
	3% Area Weightage	**3**								
	Total	**103**								
6	M.S. Casing pipe collars 'C' Class (P.No-111,I.No-86,PRED 12-13 SR)									
		Each	14	10			140.00		154.50	21630.00
	Basic Rate	**150**								
	3% Area Weightage	**4.5**								
	Total	**154.5**								

Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate	Amount
7	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm with all lead and lift, loading, unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work.(P.No-530,I.No-39b,BWSSB SR 13-14)								
		Sq.cm	14	1100	20		308000.00	0.34	104689.20
	Basic Rate	**0.33**							
	3% Area Weightage	**0.0099**							
	Total	**0.3399**							
8	Labour charges for erection as new /repaired submercible pumpset allong with GI pipe (32/50mm) cable (new submercible pumpset if required will be supplied by the department free of cost and released pumpset shoud be handed over to department including transportation (Each lenth =6.00) Page No. 564, Items No-3 BWSSB SR for 2013-14)								
		per length	14	59			826.00	90.64	74868.64
	Basic Rate	**88**							
	3% Area Weightage	**2.64**							
	Total	**90.64**							
9	Erection of combined panel board meter board with all necessary materials and labour including providing CC 1:3:6 foundation bed etc,. Complete for basement out door type.(MR)								
		Nos	14				14.00	475.00	6650.00
10	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc.,with all lead and lift, loading, unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work P No.32/I No 3b KPWD Electrical SR 2010-11								
		Nos	14	3			42.00	150.00	6300.00
11	Supplying and laying of LT UG cable having aluminum conductor PVC insulated sheathed, galvanized, steel wire/steel tape armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 sqmm cable (confirming to IS 1554)(P.No - 553, I.No-10(d),BWSSB SR 13-14)								
		Mtr	14	38			532.00	169.95	90413.40
	Basic Rate	**165**							
	3% Area Weightage	**4.95**							
	Total	**169.95**							
12	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete sutting road surfaces(P.No - 554, I.No - 12 (b),BWSSB SR 13-14)								
		Mtr	14	38			532.00	85.00	45220.00
13	Supplying and fixing of class A GI pipe on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class 40mm (P. No. 555, I. No - 15(b),BWSSB SR 13-14)								
		Mtr	14	3			42.00	294.58	12372.36
	Basic Rate	**286**							
	3% Area Weightage	**8.58**							
	Total	**294.58**							
14	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit … The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia, (P No. 552, I No.- 7 , BWSSB SR 13-14)								
		Nos	14				14.00	2727.00	38178.00
15	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class 16sqmmUG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.(P. No. 555 / I.No. 16(b),BWSSB SR 13-14)								
		Nos	14				14.00	280.00	3920.00

Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate	Amount
16	Supplying and fixing of polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc.,Size 20 x 20 x 2.5 inches with all lead and lift, loading, unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work(P.No - 521, I.No - 2 (f), BWSSB SR 13-14)								
		Nos	14				14.00	311.58	4362.05
	Basic Rate	**302.5**							
	3% Area Weightage	**9.075**							
	Total	**311.575**							
17	Borewell Cap and Clamp Set (PWD SR 2018-19, Page No. XLVII, Sl no. 17)								
		Set	14				14.00	1800.00	25200.00
18	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings17.50 HP 30 stage								
		Nos	4				4.00	72126.00	288504.00
19	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 20 HP 40 Stage								
		Nos	5				5.00	90595	452975.00
20	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 25 HP 50 Stage								
		Nos	5				5.00	125677.00	628385.00
21	Providing, laying & joining GI pipes confirming to IS specification of approved make with fittings such as collars bends elbows tees nipples plugs with cuts threads using white lead & threads for joints wherever necessary as per direction including all lead & lift etc,. complete 'A' grade(excluding cost of fittings) 50mm dia GI pipe B Class (SR 18-19 PWD,P.No.XLVII sl.no.1								
		Rmtr	14	354			4956.00	415.00	2056740.00
22	Supply and fixing Collar for GI Pipes 50MM (page No.XLVII, Sl No.2,PWD SR 2018-19								
		Nos	14	60			840.00	180.00	151200.00
23	Supplying of submersible pump cable 1X3X6 Sqmm (Page No. XLVII, Sl No.8,PWD SR 2018-19								
		Mtr	14	738			10332.00	144.00	1487808.00
24	Supplying & delivery at site brand new / Essen / lotus sunsines/Adarsh/Gk controls best indigenous make combine energy meter-cum-control panel board unit of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph,50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key ribs should be provided inside the door canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50Hz,380/440 AC supply shall be consisted etc., completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components panel board for suitable pumpset above Up to 20HP with star delta starter (MR) Page No.XLVII, Sl No.13, PWD SR 2018-19								
		Nos	14				14.00	21000.00	294000.00

Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate	Amount
25	Supplying & delivery of brand 50mm Gate Valve. (PWD SR 18-19, P.No.XLVII Sl.no,15								
		Nos	14				14.00	1800.00	25200.00
26	Supplying & delivery of brand 50mm Non Return Valve. (PWD SR 18-19, P.No.XLVII Sl.no,16)								
		Nos	14				14.00	1800	25200
27	Supplying and fixing MCB (P.No-XLVII, Sl .No - 19, PWD SR 18-19)								
		Nos	14				14.00	900.00	12600.00
28	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in Ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications(P.No - 6, I.No - 2.3, PWD SR 18-19)								
		Cum	14	273.00	0.6	0.75	1719.90	316.94	545105.11
	Basic Rate	**299**							
	6% Area Weightage	**17.94**							
	Total	**316.94**							
29	Providing and installing at site of work 63mm (0.662) PVC Pipes of 6kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including joining of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete (P.No - 94, I.No - 13.73.2,PWD SR 18-19)								
		Mtr	14	273.00			3822.00	394.32	1507091.04
	Basic Rate	**372**							
	6% Area Weightage	**22.32**							
	Total	**394.32**							
30	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.No - 7, I.No - 2.11, PWD SR 18-19)								
		Cum	14	273.00	0.6	0.75	1719.90	128.26	220594.37
	Basic Rate	**121**							
	6% Area Weightage	**7.26**							
	Total	**128.26**							
	BESCOM Charges	**Nos**	14				14	20000	280000.00
								Total of Other SR Items including GST Unit Rate	**5155807.65**
								Total of PWD SR 2018-19 Items	**8000602.52**
								Sub Total	**13156410.17**
								Add 12% GST for Only PWD SR 2018-19 items	**960072.30**
								Tender premium (5% of estimated cost)	**657820.51**
								Total	**14774302.98**
								Add 1% DPR charges	**150000.00**
								Add 0.5% PMC charges	**75000.00**
								Miscellaneous and Unforeseen charges	**697.02**
								Grand Total	**15000000.00**

Technical Sanction Accorded For Rs 150 lacs only
Head of A/C P.3.293
CER NO :304 Dt:20.03.2020

CE (YNK)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary

2) The work spot comes under B.B.M.P

3) The provisions made in the estimate are necessary and minimum.

4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20,PRED 2019-20, SE-RDED approved Rate and Issued Rates.

PRASAD CONSULTANTS BANGALORE

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer 20/03
BBMP